

GP-300969

**MAXIMUM TORQUE-PER-AMPERE CONTROL
OF A SATURATED SURFACE-MOUNTED
PERMANENT MAGNET MACHINE**

ABSTRACT OF THE DISCLOSURE

An electric motor control system including a stator for producing a magnetic field, a surface mount permanent magnet rotor rotated by the magnetic field, a motor shaft coupled to the rotor, power electronics for 5 controlling the magnetic field in the stator, and where the power electronics controls the q-axis and d-axis current components for the electric motor.